



WASHOE COUNTY

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STAFF REPORT

BOARD MEETING DATE: April 12, 2016

CM/ACM KS
Finance DN
DA ✓
Risk Mgmt DC
HR N/A
Comptroller CH

DATE: March 2, 2016
TO: Board of County Commissioners
FROM: Alan Jones, P.E., Senior Licensed Engineer
Community Services Department, 954-4651, ajones@washoecounty.us
THROUGH: Dwayne Smith, P.E., Division Director, Engineering and Capital Projects
Community Services Department, 328-2043, desmith@washoecounty.us
SUBJECT: Approve an Interlocal Agreement between Washoe County and the City of Reno for the Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan Amendment [County share is \$68,569.50]. (Commission District 5.)

SUMMARY

Sanitary sewer collection, treatment and disposal associated with new development in the Stead/Lemmon Valley area requires multiple considerations since the sewer service areas do not align with the jurisdictional boundaries of unincorporated Washoe County and the City of Reno. These considerations have increased in recent years with the annexation of significant areas into the City of Reno resulting in more developable areas that were originally planned to be serviced by Washoe County's Lemmon Valley Water Reclamation Facility.

To address these and other issues associated with sanitary sewer service, Washoe County and City of Reno recognized early that a joint effort would be mutually beneficial for the Stead/Lemmon Valley area.

The City of Reno has entered into an agreement with Stantec Consulting to provide engineering services for the Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan Amendment in the amount of \$134,450. Staff of Washoe County and the City of Reno has been in direct contact for discussions on the scope of the contract with Stantec. The cost allocation for the contract was based on the relative square footage of both of the entity's service territories. The City of Reno would be responsible for \$65,850.50 (51%) of the fees and Washoe County would be responsible for \$68,569.50 (49%) of the fees.

The City of Reno has entered into an agreement with Stantec Consulting to provide engineering services for the Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan Amendment in the amount of \$134,450.

Staff has reviewed the scope of work and is in concurrence with scope as outlined in the agreement (Exhibit A) and the cost allocation.

Washoe County Strategic Objective supported by this item: Safe, Secure and Healthy Communities.

AGENDA ITEM # 5.I.4.

PREVIOUS ACTION

None Taken

BACKGROUND

The Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan Project between the City of Reno and Stantec began in 2012 with a scope of the work to determine the capacities of the sanitary sewer collections systems and treatment facility within the City of Reno territory. Over the course of the analysis, it became evident that it was important to evaluate the valley jointly with the City of Reno and Washoe County.

Washoe County contracted with Stantec to provide engineering services to match the analysis efforts with what had been provided for the City of Reno. That scope included the following:

- Data Collection and organization
- Sewershed and demand analysis based on existing development
- Wastewater flow monitoring
- Model calibration
- Build-out sanitary sewer demand analysis

The total fees for this effort were \$69,200.

After the analysis was completed, it was determined that Stantec would be contracted by both entities to provide engineering services to complete the analysis. The proposed scope is as follows:

- Develop proposed alternatives with input by the City and County
- Perform supplementary survey as needed
- Prepare one combined sewer model
- Incorporate TMWA water usage data for industrial development
- Allocate growth projections by sewershed to estimated time frames in conjunction with Truckee Meadows Regional Planning Agency growth study and conversations with the development community
- Conduct additional data collection using survey and/or wastewater flow monitoring
- Re-evaluate lift station and wastewater flow data to calibrate the analysis
- Re-evaluate the existing systems ability to handle build-out flows, identify deficiencies and opportunities for improving the efficiency of or modifying the existing system
- Determine proposed infrastructure required to accommodate future wastewater flows within the sewer system
- Prepare a Capacity Analysis and Master Plan for the combined City/County study area.

The attached interlocal agreement provides the mechanism needed for the County to pay for their portion of the consultant agreement with Stantec Consulting.

FISCAL IMPACT

The Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan was identified and recommended for approval by the Board in the 2015-2016 Capital Improvement Program. Sufficient funds and budget authority exist in cost center 668500, account 710100. Revenues in support of the analysis are provided from connection fees.

RECOMMENDATION

It is recommended the Board of County Commissioners approve an Interlocal Agreement between Washoe County and the City of Reno for the Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan Amendment [County share is \$68,569.50].

POSSIBLE MOTION

Should the Board agree with staff's recommendations, a possible motion would be: "Move to approve an Interlocal Agreement between Washoe County and the City of Reno for the Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan Amendment [County share is \$68,569.50]."

Figure No. 1

Title

Lemmon Valley/Golden Valley Project Study Area Map

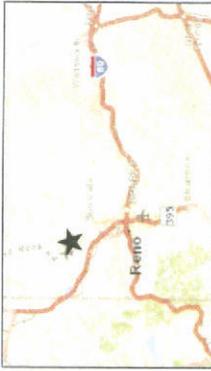
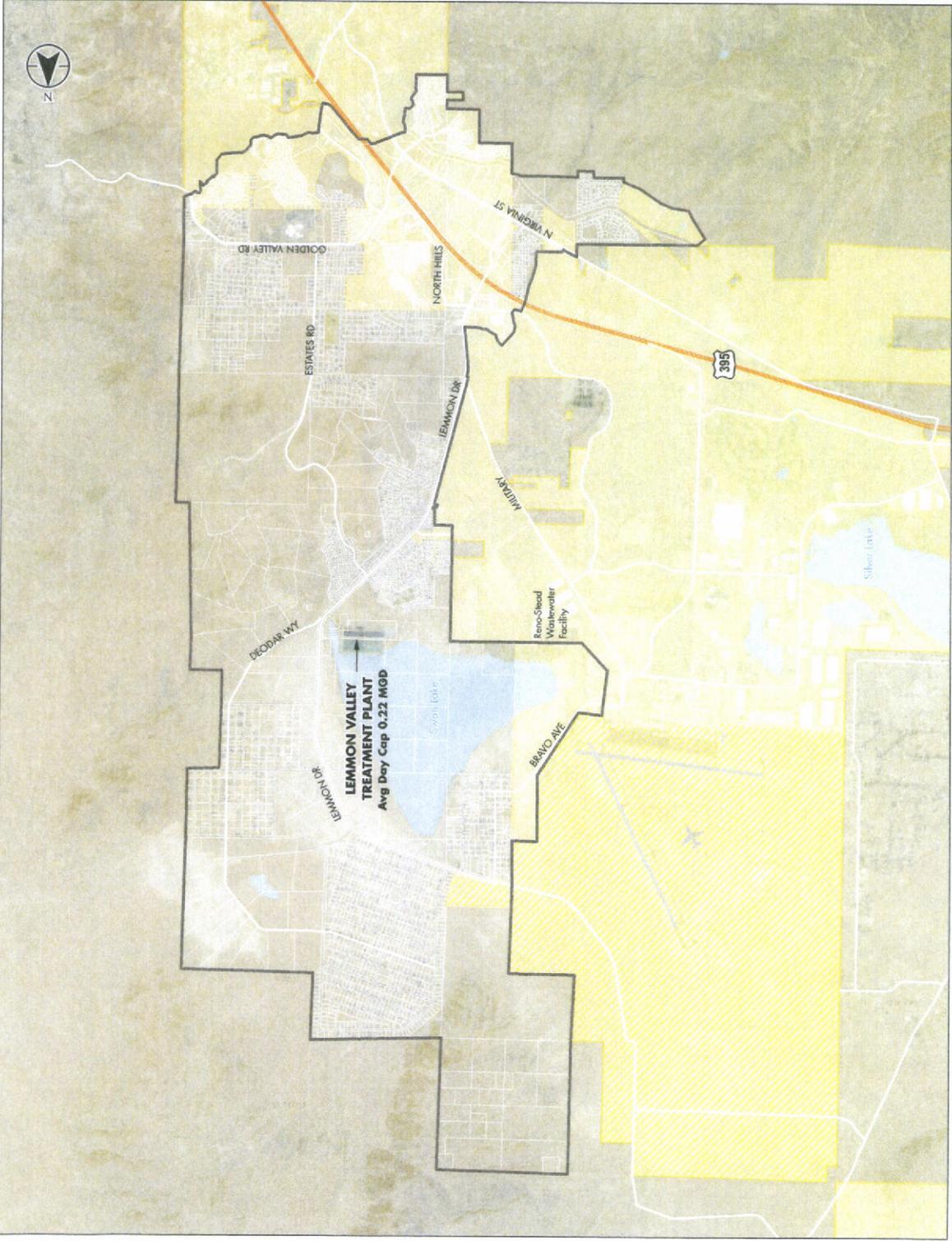
Client/Project
Washoe County Department of Water Resources
Lemmon Valley / Golden Valley Analysis for
Stead Sanitary Sewer Master Plan

Project Location
890 01 142
148,000 (A) original document size of (11x17)
Washoe County, NV
Independent Review by WMA on 2015-04-02

0 1,200 2,400 3,600 4,800
Feet
1:48,000 (A) original document size of (11x17)

Legend

-  Study Boundary (17.8 mi sq. miles)
-  Unincorporated Washoe County Jurisdiction
-  Washoe Parcel Base (Nov 2014 n=2,990)
-  Arterials - Collectors
-  City of Reno
-  Reno Stead Airport Property
-  Water Bodies



Notes

1. Coordinate System: NAD 1983 StatePlane Nevada West IPS 2703 Feet
2. Data files produced under agreement with the Regional Board of Water Control, Washoe County NV, 2015.
3. Orthophotoy ESRI



Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

INTERLOCAL AGREEMENT

1) PARTIES

This Interlocal Agreement ("Agreement") is entered into between the City of Reno ("Reno"), a municipal corporation, and Washoe County ("County"), a political subdivision of the State of Nevada, collectively the "Parties". In consideration of the mutual promises contained in this Agreement, the Parties agree as follows:

2) RECITALS

2.1 The Parties are public agencies as defined in NRS 277.100(1)(a).

2.2 NRS 277.180 provides that any one or more public agencies may contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any public agency, entering into the contract, is authorized to perform.

2.3 Reno and Stantec Consulting entered into a Consultant Agreement for Stead/Lemmon Valley Sanitary Sewer Capacity Analysis and Master Plan Amendment in the amount of \$134,450.00 (the "Services"). The description of the work is set forth in Exhibit A.

2.4 County has agreed to reimburse Reno the sum of \$68,569.50 for the Services.

3) RIGHTS & DUTIES

3.1 Reno

3.1.1 Reno has contracted with Stantec Consulting, who will perform the services the Project and submit invoices to Reno services described in Exhibit A. Reno will review and verify the invoices. Reno will then submit invoices for reimbursement to County upon receipt by Reno.

3.1.2 Reno will, through its designated representative, provide to County any information requested relating to any invoice submitted for payment.

3.1.3 Reno will set up a separate account for the Service, if not already existing,

so that check numbers along with copies of cancelled checks for all expenditures can be submitted, as well as an exact itemization of Project expenditures, and copies of itemized invoices.

3.2 County

3.2.1 Upon the submission of an invoice for payment, pursuant to Paragraph 3.1.1 above, the County's representative shall promptly review the invoice, request any further information or documentation required, and process the invoice for payment within thirty (30) days following his approval.

3.2.2 The total amount of invoices paid pursuant to this Agreement for County is the sum of \$68,569.50.

4) INDEMNIFICATION

4.1 The Parties agree that each will be responsible for any liability or loss that may be incurred as a result of any claim, demand, cost, or judgment made against that Party arising from any negligent act or negligent failure to act by any of that Party's employees, agents in connection with the performance of obligations assumed pursuant to this Agreement.

4.2 The Parties further agree, to the extent allowed by law pursuant to Chapter 41 of the Nevada Revised Statutes ("NRS"), to hold harmless, indemnify and defend each other from all losses, liabilities or expenses of any nature to the person or property of another, to which each may be subjected as a result of any claim, demand, action or cause of action arising out of the negligent acts, errors or omissions on the part of employees.

5) MISCELLANEOUS PROVISIONS

5.1 This Agreement is binding upon and inures to the benefit of the Parties and their respective heirs, estates, personal representatives, successors and assigns.

5.2 This Agreement is made in, and shall be governed, enforced and construed under the laws of the State of Nevada.

5.3 This Agreement constitutes the entire understanding and agreement of the Parties with respect to the subject matter hereof, and supersedes and replaces all prior understandings and agreements, whether verbal or in writing, with respect to the subject matter hereof.

5.4 This Agreement may not be modified, terminated, or amended in any respect, except pursuant to an instrument in writing duly executed by the Parties.

5.5 In the event a party fails to appropriate or budget funds for the purposes as specified in this Agreement, Reno hereby consents to the termination of this Agreement. In such event, the party shall notify Reno in writing and the Agreement will terminate on the date specified in the notice. The Parties understand that this funding out provision is required under NRS 244.320 and NRS 354.626.

5.6 In the event either Party brings any legal action or other proceeding with respect to the breach, interpretation, or enforcement of this Agreement, or with respect to any dispute relating to any transaction covered by this Agreement, the losing Party or Parties in such action or proceeding shall reimburse the prevailing Party or Parties therein for all reasonable costs of litigation, including reasonable attorneys' fees.

5.7 No delay or omission by either Party in exercising any right or power hereunder shall impair any such right or power or be construed to be a waiver thereof, unless this Agreement specifies a time limit for the exercise of such right or power or unless such waiver is set forth in a written instrument duly executed by the person granting such waiver. A waiver of any person of any of the covenants, conditions, or agreements hereof to be performed by any other Party shall not be construed as a waiver of any succeeding breach of the same or any other covenants, agreement, restrictions or conditions hereof.

5.8 All notices, demands or other communications required or permitted to be given in connection with this Agreement, shall be in writing, and shall be deemed delivered when personally delivered to a Party (by personal delivery to an officer or

authorized representative of a corporate Party) or, if mailed, three (3) business days after deposit in the United States mail, postage prepaid, certified or registered mail, addressed to the Parties as follows:

To Reno: John Flansberg, P.E., Director of Public Works
City of Reno
1 East First Street, 7th Floor
Reno, Nevada 89501

To County: David Solaro, Director of Community Services
1001 E. 9th Street
Reno, NV 89512

5.9 This Agreement is effective upon the date the last signing Party signs this Agreement ("Effective Date").

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement.

WASHOE COUNTY

CITY OF RENO

Dated this ___ day of _____, 2016

Dated this ___ day of _____, 2016

By _____
Kitty K. Jung, Chair

By _____
Hillary L. Schieve, Mayor

ATTEST:

ATTEST:

Washoe County Clerk

Ashley Turney, Reno City Clerk

APPROVED AS TO FORM:

Deputy City Attorney

EXHIBIT "A"

SCOPE OF WORK

**STEAD / LEMMON VALLEY
Sanitary Sewer Capacity Analysis and Master Plan**

February 23, 2016

**Stantec Consulting
6980 Sierra Center Parkway, Suite 100
Reno, Nevada 89511
(775) 850-0777**

SCOPE OF WORK
STEAD / LEMMON VALLEY
Sanitary Sewer Capacity Analysis and Master Plan

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TASK 1 PROJECT DESCRIPTION

1.1 General

The Stead Sanitary Sewer Interceptor Capacity Analysis and Master Plan Project began in 2012 with a scope of work to determine the functionality of the Reno Stead Water Reclamation Facility (RSWRF), associated interceptor and pump station capacities under existing and future/build-out demands, identify potential deficiencies and develop proposed sanitary sewer interceptor and pump station recommendations to serve future/build out development. Over the course of the project it became increasingly important to evaluate the valley jointly with Washoe County (COUNTY) and the Lemmon Valley Wastewater Treatment Plant (LVWTP). The COUNTY subsequently contracted with Stantec to update the planning analyses within the COUNTY to include the latest parcel base data and to prepare an existing conditions hydraulic model of County owned interceptor infrastructure contributing to the LVWTP.

Stantec's services completed under the original contract include data collection and review, surveying of existing infrastructure, existing and future/build out demand analyses, existing conditions hydraulic modeling / calibration and wastewater flow monitoring.

Additional, out of scope services provided under the original contract include two reevaluations of the existing and future/build out demand analyses, updating the original December 2010 parcel base data to the July 2013 and July 2015 parcel base data, updates of hydraulic models for each new set of planning data, additional meetings with the City of Reno and Washoe County for coordination of Lemmon Valley Wastewater Treatment Plant, numerous iterations of sewersheds re-delineations due to additional information provided and associated updates of planning spreadsheets.

Remaining items from the original scope of work that have not been completed include proposed alternatives evaluation and modeling and report preparation.

In addition to completing these services, new services requested include refinement of sewersheds to better assess separating of services sewerage to Lemmon Valley infrastructure versus sending flows to TMWRF; further coordination with the city and county for proposed alternatives, combining of city and county hydraulic modeling for existing and future/build out demands in SewerGEMS, integration of recently obtained TMWA annual consumption data into the existing conditions spreadsheet and usage of this information to develop recommendations for future build-out projections, coordination with TMRPA staff to integrate their growth study factors in order to attribute build-out conditions by area within estimated time frames. To accomplish this task, STANTEC will also attempt to contact the developers/consultants to document intended process/construction scheduling and make notations within the ArcGIS data for long term tracking/monitoring purposes. An ArcGIS map for internal purposes will be created to illustrate the growth projections and review with CITY/COUNTY for input. New services also include potential surveying of existing infrastructure to verify proposed alternatives are viable, additional wastewater flow monitoring and preparation of mapping and one combined Stead / Lemmon Valley Report.

STANTEC shall perform the following tasks on this project:

1. Conduct a kickoff meeting with the city of Reno (CITY) and Washoe County (COUNTY) to verify and agree upon the project scope of work, alternatives to be evaluated, final deliverables and schedule for project completion.
2. Develop proposed alternatives with input provided by the CITY and COUNTY.
3. Perform supplementary survey as needed to verify feasibility of proposed alternatives.
4. Prepare one combined SewerGems model containing all sanitary sewer interceptor and pump station infrastructure to the RSWRF and LVWTP.
5. Analyze and incorporate the recently received TMWA water usage data for industrial development and re-evaluate existing and planned development in the tributary area to estimate the wastewater flows to each sewer system under average day, peak day and peak hour scenarios.
6. Allocate growth projections by sewershed to estimated time frames in conjunction with the TMRPA growth study forecast recommendations and conversations with the development community within the Stead/Lemmon Valley areas.
7. Conduct additional data collection using survey and/or wastewater flow monitoring services if necessary.
8. Re-evaluate lift station and wastewater flow monitoring data to calibrate the analysis.
9. Re-evaluate the existing system's ability to handle build-out flows, identify deficiencies and opportunities for improving the efficiency of or modifying the existing system.
10. Determine proposed infrastructure required to accommodate future wastewater flows within the sewer system.
11. Prepare a Capacity Analysis and Master Plan for the combined CITY/COUNTY study area.

1.2 Schedule

The following are scheduled milestones for the project:

Date	Milestone Task
March 23, 2016	Notice to proceed.
April 13, 2016	Submit Final Existing Planning Analyses for City Review.
April 20, 2016	Submit Final Existing Conditions SewerGEMS models.
May 11, 2016	Submit Final Future/Build Out Planning Analyses for City Review.
May 25, 2016	Submit Final Future/Build Out SewerGEMS models.
June 29, 2016	Submit draft Capacity Analysis and Master Plan Report including all sewer systems analyses. (Assumes Client Review 2 weeks)

Date	Milestone Task
July 27, 2016	Submit final Capacity Analysis and Master Plan Report including supporting backup data and electronic SewerGEMS Models.

TASK 2 GENERAL

2.1 Project Management

STANTEC's appointed Project Manager will be:

Trina Magoon, PE
 Stantec Consulting Inc.
 6980 Sierra Center Parkway, Suite 100
 Reno, Nevada 89511
 (775) 850-0777 ext. 202
 tmagoon@stantec.com

STANTEC's project manager shall be the point of contact for the CITY.

2.2 Meetings and Coordination

2.2.1 Kick-off meeting

STANTEC's Project Manager and/or representative(s) will meet with the CITY and COUNTY to submit the project schedule that includes dates of all proposed submittals and review meetings, and to discuss the schedule and the tasks necessary to accomplish it. Many of the key project issues have been discussed in this scope of work and in the contract negotiations, however it is essential to confirm and discuss all major project goals and constraints during this meeting.

2.2.2 Project team meetings

STANTEC will hold milestone management meetings to coordinate progress, resolve issues, and determine follow up actions. STANTEC has budgeted for two (2) project team meetings with CITY staff.

2.3 Site Visits

STANTEC will visit the project site to verify the initial feasibility of proposed alternatives. It is anticipated that STANTEC will make up to two (2) site visits.

2.4 Anticipated CITY Involvement

The CITY personnel will be asked to be involved in the following tasks and/or issues.

- Coordination, review and approval of the project work plan;

- Evaluation of the computer scenarios and run results with respect to determining the improvements priorities;
- Provide information regarding changes in land use, future land use, future annexations, and;
- Day to day communication and coordination.

TASK 3 CAPACITY ANALYSIS

3.1 *Data Collection & Organization*

STANTEC will collect and review any new pertinent data from the CITY and other outside sources.

The CITY will provide STANTEC with any new written agreements with currently undeveloped property owners relating to any special arrangements for sanitary services, prior to the Kickoff meeting.

3.2 *Update Demand Analysis Based on Existing and Planned Development and add an assumption of estimated development time frames based upon the TMRPA growth study.*

Stantec recently received city-wide water usage data from the Truckee Meadows Water Authority (TMWA) for commercial and industrial accounts. This data will be linked to existing parcels and analyzed to adjust wastewater generation to known water usage. The data will be further analyzed to come up with standard conversion factors for industrial usages within the Stead / Lemmon Valley area to more closely project future / build out sanitary infrastructure demands. Working closely with staff at TMRPA and results of their growth forecast study, Stantec will assign growth rates and build-out time frame assumptions to corresponding sewersheds.

3.3 *SewerGems Modeling*

STANTEC will update the existing conditions SewerGEMS model to incorporate the newest existing planning data with the physical information provided for the existing interceptors, trunk and collector sewer systems and lift stations, and incorporate the future/build out planning data and proposed improvements into the future/build out conditions model. Each database will be in a form that can be linked with both ArcGIS and AutoCAD software. STANTEC will submit hydraulic modeling data and output files in digital format on a CD-ROM to the CITY for all computer models.

3.4 Wastewater Flow Monitoring

The CITY has flow monitoring data at locations throughout the City. It will be the responsibility of STANTEC to coordinate and subcontract for any additional sites deemed necessary. It is estimated that 3 additional flow monitoring locations will be evaluated for this master plan study. The additional data will be input into the modeling setup and calibration. The additional flow monitoring locations will be identified then performed under task 5, of this scope of work, following the CITY's authorization.

3.4.1 Update the Flow Monitoring comparison with Demand Analysis based on Development Memorandum

STANTEC will prepare a memorandum, complete with GIS maps and excel spreadsheet(s) that identify the results of the demand analysis based on development compared with lift station records and results of the flow monitoring, and wastewater flow characteristics. A detailed schematic will be developed to visually represent both quantity and quality of each wastewater basin. The mapping will reflect average flow conditions and peak flow conditions. The memorandum will be incorporated into the final report.

3.5 Capacity Analysis and Master Plan Report

A draft outline of the Capacity Analysis and Master Plan Report will be submitted for review and approval. Once the CITY has approved the outline, a draft report will be compiled and submitted for review and approval. Upon approval from the CITY of the draft report, STANTEC will prepare a final report. Ten (10) printed copies of the final report will be delivered to the CITY along with a CD-ROM containing the report in digital format (Microsoft Word and PDF). STANTEC will deliver complete and verified data sets, as well as certifying the model to the data sets.

TASK 4 SURVEYING

Should surveying services be required to ensure proposed alternatives are feasible, we have budgeted five (5) days of field time and included traffic control for one (1) day of the surveying time. This time is to obtain manhole locations, rim elevations, and invert elevations that may be required for the modeling purposes. No surveying will take place without the CITY's prior authorization.

TASK 5 WASTEWATER FLOW MONITORING

Stantec has determined three (3) additional locations in the Lemmon Valley area where flow monitoring measurements could be obtained. STANTEC will subcontract with a CITY selected consultant for the flow measurements that are needed. No additional flow monitoring will take place without the CITY's prior authorization.

TASK 6 SPECIAL SERVICES

Additional services that may arise will be performed with a CITY approved written "Supplemental Agreement". Special Services are for unforeseen needs for the project that cannot be anticipated at the time of the project scoping.

**Exhibit B
Estimated Fees
Stead Lemmon SSCA and Master Plan**

Task ID	Description	Total Labor
TASK 2	GENERAL	\$ 12,950.00
TASK 3	CAPACITY ANALYSIS	\$ 88,500.00
TASK 4	SURVEYING	\$ 11,000.00
TASK 5	WASTEWATER FLOW MONITORING	\$ 12,000.00
TASK 6	SPECIAL SERVICES	\$ 10,000.00
	Total	\$ 134,450.00



Stantec

Exhibit "C"
STANTEC CONSULTING INC. - Reno Office
STANDARD FEE SCHEDULE
January 2015 – December 2015

Listed herein is a schedule of fees for engineering, planning and surveying services most frequently performed by Stantec Consulting Inc.

Invoices will be submitted on completion of a project and become due on presentation. For jobs lasting longer than four weeks, monthly progress invoices will be submitted and become due on presentation.

<u>PROFESSIONAL</u>	<u>BILLING LEVEL</u>	<u>RATE/HOUR</u>
Project Principal	Level 14-17	\$181.00 - \$246.00
Project Manager / Project Engineer	Level 12-14	\$157.00 - \$181.00
Engineer / Landscape Architect	Level 8-12	\$114.00 - \$157.00
Expert Witness (Research, Meetings, etc.)		\$250.00
Expert Witness (Depositions, Testifying, etc.)		\$350.00
<u>TECHNICAL</u>		
Inspector	Level 4-7	\$81.00 - \$106.00
Technician	Level 4-7	\$81.00 - \$106.00
Clerical/Word Processor	Level 2-5	\$65.00 - \$89.00
<u>SURVEYING</u>		
1-Man Crew (includes equipment charges)		\$115
2-Man Crew (includes equipment charges)		
<u>OTHER DIRECT COSTS</u>		
General Disbursements (e.g. computer, communications, postage, courier, incidental printing/plotting)		8% of invoiced labor
Robotic Total Station - Electronic Measuring		\$15.00/hour
Vehicle		\$1.00/mile or \$10.00/hour min.
Safety Instrumentation		\$15.00/hour
Per Diem		Expenses
Supplies		Cost + 10%
Outside Services		Cost + 10%
GPS Receivers (Resource Grade)		\$75.00 unit/day
GPS Receivers (Geodetic Grade)		\$200.00 unit/day

Computer and computer-aided design will be charged at a special rate.
 This fee schedule contains confidential business information and is not to be reproduced or distributed for any purpose other than originally intended.